



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,791	09/30/2003	Gunichi Nakamura	KOIKE-01000	8365
7590	08/26/2004		EXAMINER	
Jonathan O. Owens HAVERSTOCK & OWENS LLP 162 North Wolfe Road Sunnyvale, CA 94086			SMITH, RICHARD A	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

K8

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/676,791	NAKAMURA ET AL.	
	Examiner	Art Unit	
	R. Alexander Smith	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) 1-12 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/2/04.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-12 are objected to because of the following informalities:

Claim 1:

- a. "and away longitudinal thereof from each other" in line 5 is confusing because it is not clear as to the antecedent(s) of these limitations. Furthermore, what is meant by "away" longitudinally thereof?
- b. "away longitudinal thereof from each other" in line 7-8 is idiomatically incorrect.

- c. "each of which there is penetrated" in line 8 is grammatically and idiomatically incorrect.
- d. "and in which" in line 10 does not clearly reference its antecedent.
- e. "and in which... ...corresponding ones in the scale member" in lines 10-12 is idiomatically confusing.
  - 1) "for the fixing holes" appears to reference the scale member and needs to clearly indicate that its antecedent is the fixing holes of the case member.
  - 2) "corresponding ones" does not properly refer to its antecedents.
- f. "the machine with the sensor" in line 14 is idiomatically confusing. Furthermore, "the sensor" has no antecedent.
- g. "the position signal carrying area" in lines 14-15 does not properly refer to its antecedent, i.e., "a region" in line 4.
- h. "which detects" in line 15 is confusing because it is unclear as to whether the detector or the sensor is the antecedent of "which."
- i. "travels" in line 15 should be --travel--.
- j. "being to be fixed" in line 17 is grammatically incorrect.
- k. "penetrated" in lines 8 and 18 should be --inserted-- in order to be grammatically and idiomatically correct. Furthermore, this problem is also repeated throughout the specification.

Claim 3: "the inner surface" and "the lateral portions" in line 3 each lack antecedent basis.

Claim 5: "between opposite surfaces" makes the claim language confusing since it is unclear to the examiner how this is possible. Furthermore, there is no drawing that appears to support or show the limitations of claim 5.

If the examiner interprets "opposite" as --opposing-- or --adjacent--, then the claim limitations make sense. This interpretation also appears to be in agreement with what is shown in the drawings. Although there are similarities in many of the varying definitions for "opposite" and "opposing", as used "opposite" is confusing. Therefore, for the purpose of this Office action and to expedite prosecution the examiner is assuming that opposite means opposing. Furthermore, the applicant should note that this problem also occurs in claim 8 and twice in claim 9 and throughout the specification. The examiner requests that the Applicant review the specification accordingly to make sure the Applicant's intent is clearly stated.

Claims 5-7: For claim 5, the specification provides no antecedent basis for enabling a reinforcing means. A text search of the specification reveals no reinforcing structure clearly disclosed as such. Given the limitations of claim 6 describing the details of said reinforcing means, for the purpose of this Office action and to expedite prosecution the examiner is treating the reinforcing means as the plate-shaped spacer member 36 described on page 25.

The problem with claim 7 is similar to claim 6 and the examiner is treating the reinforcing means for claim 7 as the plate-shaped spacer member 41.

The Applicant needs to clarify the elements that are these reinforcing means and members and to describe them as such in the specification.

Furthermore, claims 6 and 7 and pages 25, 33, etc. of the specification, appear to be stating that the fastening member, mounting screw, etc., are penetrated (by something which passes through the fixing hole). Assuming the Applicant's intent is to insert or pass the screw through the hole then the above phrasing is grammatically and idiomatically incorrect and the entire specification needs to be reviewed accordingly.

Claims 7-11: These claims are replete with grammatical, idiomatic and antecedent problems similar to the objections as noted for claim 1 above. The examiner requests the applicant review the claims accordingly. In addition to the above the following are also noted.

Claim 7: "either" in line 6 should be --each--.

Claim 11: "penerate" should be --penetrate--

Claim 12:

- a. "a second fixing means" is confusing since the applicant has not introduced a first fixing means.
- b. "a second fixing means" and "a force fit structure" is objected for similar reasons as described for claims 5-7 above since the examiner does not find any antecedent support in the specification that clearly defines said second fixing means and said force fit structure.

***Allowable Subject Matter***

3. Claim 1 would be allowable if rewritten to overcome the claim objections set forth in this Office Action.

4. Claims 2-12 would be allowable if rewritten to overcome the claim objections set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

5. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

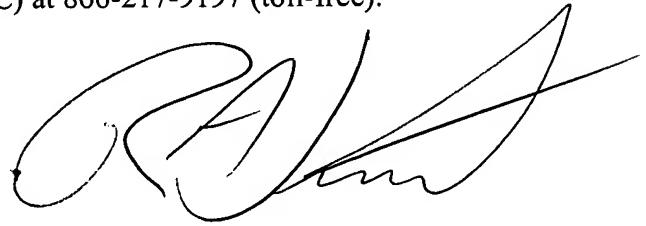
***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related scale devices.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Alexander Smith  
Examiner  
Technology Center 2800

RAS  
October 20, 2004